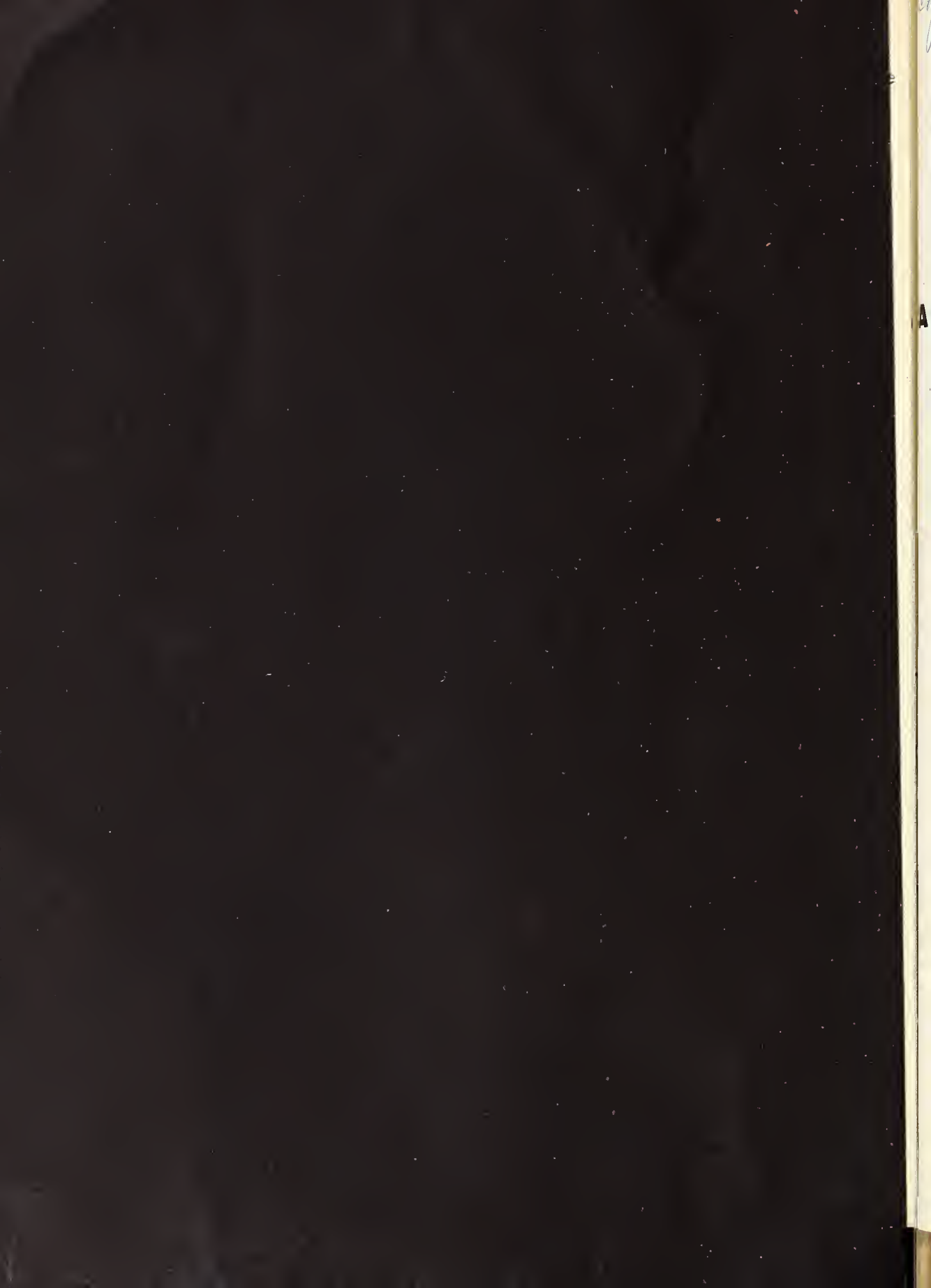


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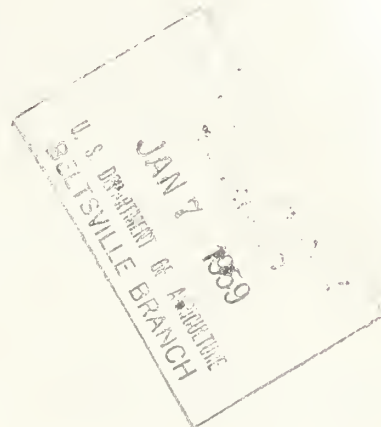


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Marketing Research Report No. 368

SOUR CREAM

**A STUDY OF ITS MARKET POTENTIAL
IN DES MOINES, IOWA**



**Marketing Research Division
Agricultural Marketing Service
U.S. Department of Agriculture
Washington, D.C.**

PREFACE

This study is designed to provide producers, processors, and others in the dairy industry with facts concerning possibilities for increasing sales of cultured sour cream. The study is part of a broad program of continuing research aimed at expanding markets for farm products.

The Agricultural Marketing Service assumed major responsibility for the conduct of the research, with cooperation and advice from the American Dairy Association, the Milk Industry Foundation, and local dairies in Washington, D. C., and Des Moines, Iowa.

The project was under the general direction of Marshall E. Miller and Trienah Meyers of the Market Development Branch, Marketing Research Division, Agricultural Marketing Service. Philip B. Dwoskin and Harold Linstrom participated in the planning of the study and analysis of the data.

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October 1959

SOUR CREAM--A STUDY OF ITS MARKET POTENTIAL IN DES MOINES, IOWA

By Edward J. McGrath, agricultural economist, and
Margaret Weidenhamer, social science analyst,
Market Development Branch, Agricultural
Marketing Service

HIGHLIGHTS

A study to determine the possibilities of expanding the market potential of a uniform, high-quality cultured sour cream was conducted in Des Moines, Iowa, from July 1957 through April 1958.

An intensive promotional campaign was launched by the American Dairy Association and cooperating local dairies during August 1957, the traditional low-volume month for sales of cultured sour cream in the Des Moines area.

To provide benchmark data, sales figures were collected from July 1956. Total sales of cultured sour cream during and after the promotion appear favorable when compared with the same period a year earlier. Sales for the period July 1956 through April 1957 totaled 53 thousand pounds. Sales for the same months in 1957-58, the year in which the intensive promotion occurred, totaled 90 thousand pounds, an increase of 71 percent.

When only the month of August is considered, the increase is even more striking. In 1956, August sales at 4.3 thousand pounds, were the lowest of the year. Sales during August 1957 (the month of promotion) totaled 10 thousand pounds, an increase of 129 percent over the preceding year. These increases were partially due to an upward trend already in effect. April 1958 sales, 8 months after the promotion, were 50 percent above April a year earlier, apparently reflecting both the trend effect and some carryover from the special promotion.

The heavy increases in sales of sour cream during the promotional program had no adverse effect on related products of relatively high milkfat content.

About one month after completion of the various special promotional activities, a sample of Des Moines homemakers was interviewed to find out about their uses of sour cream and their awareness of the campaign.

Almost one-third of these homemakers had purchased some sour cream within the preceding 12 months. However, many of the users did not buy it very often; about two-thirds estimated they had bought it less than once a month during the preceding year. Making salads and baking were the two types of uses mentioned by the largest number of sour cream purchasers; sauces or toppings and dips were also mentioned by a sizable proportion.

A large number of sour cream users had not been using it long; about 4 in 10 had started buying it roughly within the preceding year, and a little over 1 in 10 had made their first purchase after the special promotion began.

Respondents' explanations of how they happened to start using the product varied, depending on how long they had been purchasing. The majority of housewives who had been buying cultured sour cream 4 years or more indicated that using it was a family habit. Among women who had been buying it less than 4 years, hearing about sour cream from friends, tasting something made with it, and advertising assume increasing importance.

Three in five homemakers said, in reply to a series of questions, that they had noticed one or more aspects of the special promotional campaign. Many of the "new" users indicated that the promotion was an important factor in their decision to try the product. Homemakers who were already users of sour cream and who were aware of the promotion were more likely to have made a recent purchase. About 2 in 10 non-users thought they might buy sour cream within the next few months, and a few indicated an intention to purchase some in the near future. Those who were aware of the promotion were more likely to say they might or probably would become users than were unaware homemakers.

The initial sales response to promotion in Des Moines and the substantially higher level of sales 8 months after the promotion (compared with same period a year earlier) lead to the conclusion that cultured sour cream has considerable potential as a growth product for the dairy industry.

Evidence from the consumer survey indicates that some, but not all, of the increase can be ascribed to the special promotion. Two other factors which must be kept in mind as possible influences are the tendency for women to use more sour cream the longer they have been using it, and the "radiation" of sales as a result of homemakers' tendency to recommend or demonstrate use of the product to friends.

In terms of the general problem--can consumption of sour cream be increased?--it is encouraging to note that both of these tendencies can make a substantial contribution, and can be stimulated and made even more effective by promotional activities.

INTRODUCTION

Objective

The basic objective of the study was to determine the possibilities offered by a cultured sour cream product of high quality for expanding the consumption of milkfat. Specifically, the study was designed (1) to determine the feasibility of expanding sales of a high-quality cultured sour cream product in a market where such a product was of limited availability; (2) to determine the effects of possible increased sales of cultured sour cream on sales of other fluid milk products; and (3) to delineate consumer reactions to such a product, including purchase and home-use patterns.

Background

For several years the dairy industry has directed its efforts toward expanding the consumption of dairy products in this country by intensified research and promotional activities. Although results have been beneficial, there still exists a chronic problem of moving greater amounts of milkfat into consumption.

Many of the dairy items for which consumption has increased in the past decade consist mostly of solids-not-fat and contain little or no milkfat. After World War II, the downward trend of butter consumption resulted in heavy accumulations of milkfat by the dairy industry (fig. 1).

Because of the high milkfat content (about 18 percent) of cultured sour cream, a tasty versatile product of sweet cream with a lactic acid-forming culture as the souring agent, increased sales offer a good possibility of expanding milkfat consumption. Because the nation's per person consumption of sour cream is extremely low, primarily because of its limited availability and relatively low consumer awareness, it is believed that a well-conceived promotional effort on the product should result in a substantial increase of milkfat consumption.

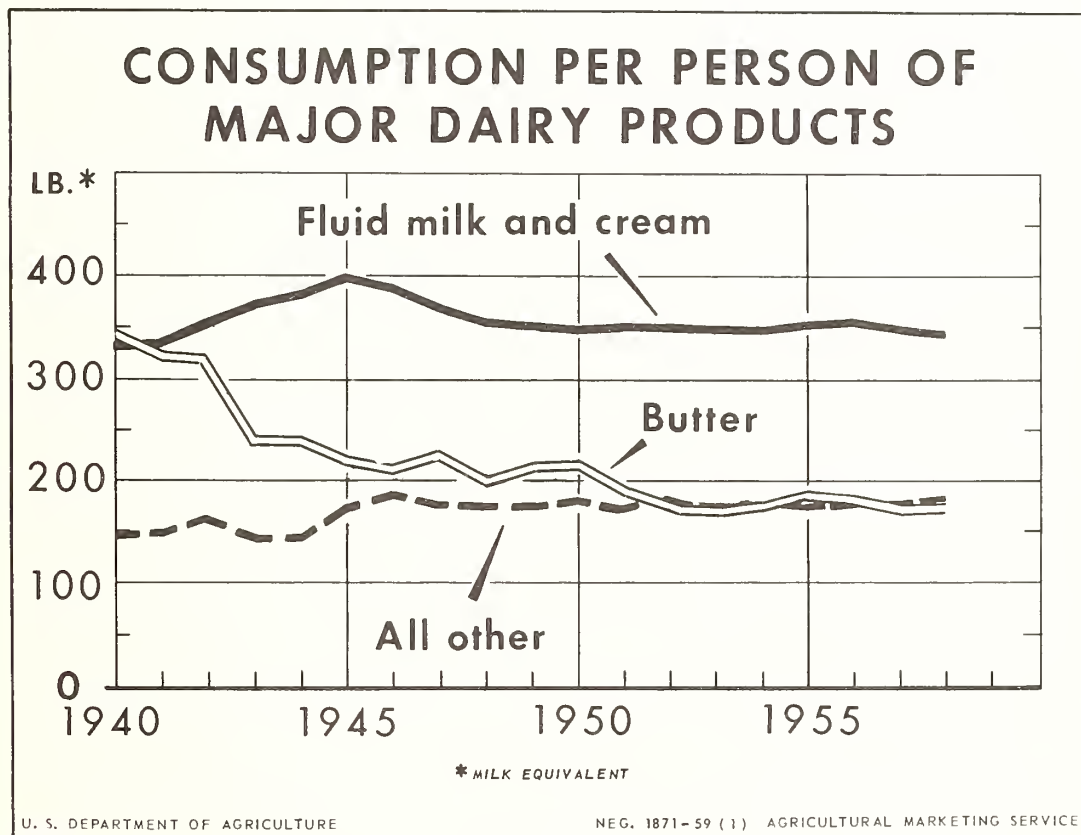


Figure 1

At present, little information is available as to the production, distribution, and consumption of cultured sour cream. The bulk of sour cream sales seems to be confined for the most part to the larger metropolitan areas where population groups of certain nationality backgrounds use the product as an ingredient in recipes traditional to their original cultures.

According to dairy-industry spokesmen, the principal problems which may hamper an increased use of sour cream are: (1) Lack of uniformity and varying quality of the product within and between markets; (2) limited availability of the product outside the larger metropolitan areas; and (3) scarcity of information on the production and distribution of sour cream on a national basis. 1/

In addition, many in the industry believe that only a relatively few of the many potential consumers know what cultured sour cream is. The idea in the minds of many housewives is that the product is simply sweet cream that had soured, been returned to the dairy, repackaged and sold as a new product. Industry spokesmen feel the housewife wonders why the price should be as high as it is, and that the use of special techniques to effect coagulation of sweet cream and provide an even texture and flavor to the product would be news to the majority of consumers.

The Test City and Methodology

The test was conducted in Des Moines, Iowa, in cooperation with the American Dairy Association and the Milk Industry Foundation. Des Moines was selected because the consumption of sour cream there was found to be low compared with larger metropolitan areas and because the local dairies agreed to cooperate in providing sales data and coordination of sales efforts. It is a city of medium size which had a population of 264,743 in July 1958 according to the Division of Vital Statistics, Iowa Department of Health, and is geographically distant from other large metropolitan areas. These factors facilitate market saturation with the product and provide the opportunity of good control and effective use of promotional efforts with limited funds.

For the purpose of sales analysis, the market area was divided by:
(1) Sales in Polk County, the standard metropolitan area of Des Moines;
(2) sales in the Des Moines marketing area outside Polk County (rural-farm);
and (3) total sales. The total market area includes 33 of the 99 counties in Iowa (fig. 2).

With the cooperation of the major dairies operating in the Des Moines market, information was obtained to determine (1) sales of cultured sour cream and related products by month for July 1956 through June 1957 (to provide benchmark data); (2) weekly sales of sour cream and related products by type of outlet for the 18-week test period, July 1 through November 2, 1957; and (3) an additional 6 months of sales data, through April 1958, to measure any sustained gain in sales of cultured sour cream.

1/ A national mail survey of the production and distribution practices for sour cream among fluid milk handlers is presently in the analysis stage. This study will make available for the first time on a national basis, the production and distribution patterns for sour cream, and the availability of other products handled.

MARKETING AREA, CULTURED SOUR CREAM MARKET TEST

Des Moines, Iowa, 1957

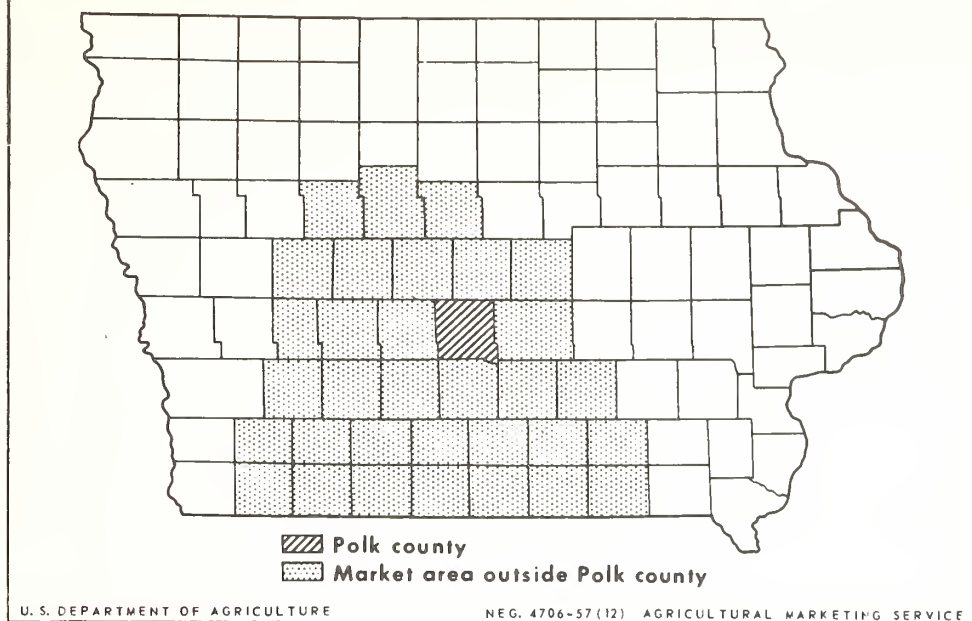


Figure 2

At the time of the market test, Des Moines had a total of 56 "Class A" supermarkets, each with an estimated sales volume of over \$400,000 per year. Twenty-eight of these stores were selected at random to comprise a sample of retail outlets to observe displays of sour cream and to determine the extent of availability of the test product before, during, and after the promotional campaign. The supermarkets were visited three times during the market test to provide measurements of any change in availability of the test product and the effect of such change on sales in retail stores.

Field work on the consumer survey was conducted in October 1957 among a scientifically selected sample of homemakers in the Des Moines area. Trained interviewers talked with these respondents in their homes to ascertain their use of and opinions about sour cream, and their awareness of the special promotional campaign which had taken place.

Promotion Program

August is the traditional low-volume month for sales of cultured sour cream in this area. During August 1957, an all-media promotional campaign was launched by the American Dairy Association and the cooperating local dairies. The program included the following: (1) Four 800-line black-and-white advertisements in the Des Moines Register and the Des Moines Tribune, August 1, 8, 22, and 29; (2) a full-page 4-color advertisement in the August 15 editions of the same newspaper; (3) 3- x 5-inch 4-color order blank leaflets for home delivery by the dairies; (4) a local spot commercial tied in with the

Disneyland program seen in Des Moines on channel WOI-TV; (5) supermarkets in the market area were furnished with reprints of the full-page 4-color advertisement to use as in-store display materials; and (6) a booklet, "50 Wonderful Ways to Use Sour Cream," was made available to the cooperating dairies for distribution in the area (see fig. 3 for reproduction of the full-page advertisement).

Because of the season, the theme of the campaign emphasized "Summer Salads with a Gourmet Touch," stressing the pleasantly tangy taste that chilled sour cream gives both garden vegetables and fruit salads.

In addition to the advertising of the American Dairy Association, the local dairies engaged in their own tie-in advertising during August. This consisted, primarily, of television and radio spots, home-delivery materials, routemen incentives, and one full-page color advertisement. In subsequent months, through April 1958, no special effort was made by the dairies to emphasize sour cream, although the product was mentioned from time to time along with other fluid-milk products.

RESULTS OF THE MARKET TEST 2/

Comparison Between Sales in 1957-58 and a Year Earlier

The total sales of sour cream during and after the promotion appear favorable when compared with the same period a year earlier. Sales during July 1956 through April 1957 totaled 52,895 pounds. Sales for the same months in 1957-58 totaled 90,460 pounds, an increase of 71 percent (fig. 4).

Greater increase is apparent if only the month of August is considered. August sales in 1956 were the lowest of the year--4,394 pounds. Sales during August 1957 (the month of promotion) totaled 10,054 pounds, an increase of 129 percent over the preceding year. The disparity between the two August figures indicates that a well-conceived promotional effort will increase the sale of cultured sour cream even when a seasonal low is involved.

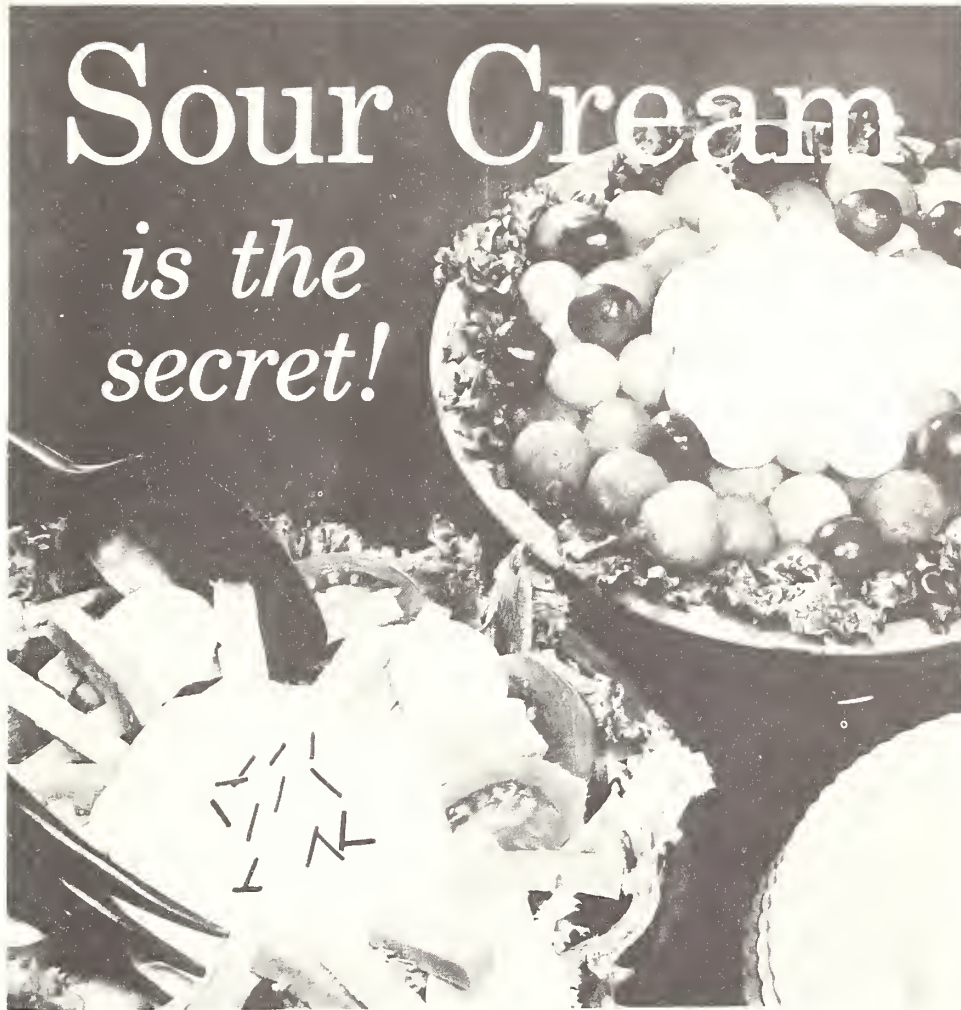
It appears that the market for sour cream in this area had been trending upward during the preceding year and the increases described above were due partially to the upward pattern already in effect 3/. However, the sales in 1957-58, when a daily average by month was taken, remained well above the same month of the previous year. For example, April 1958 sales of sour cream, 8 months after the initial promotion, were 50 percent above April a year earlier.

2/ Edward J. McGrath was responsible for this phase of the study.

3/ Because of different record-keeping procedures by some dairies and the lack of back-sales data before July 1956 by others, historical sales data on cultured sour cream from all cooperating dairies were available for only the 12-month period preceding the market test. Thus, there were not enough historical data to develop a valid statistical measurement as to the trend of cultured sour cream sales in the Des Moines market.

Sour Cream

is the secret!



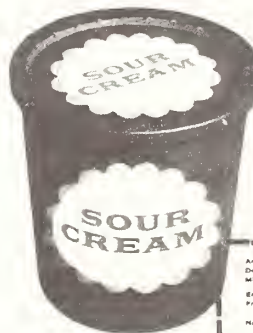
2 new "Summer Supper" Salads

You top 'em with Sour Cream right out of the carton—then sit down to a wonderful new taste in salads!

Just imagine—luscious summer salads with a gourmet touch—yet you make 'em with a "short-cut" dressing. Sour Cream is the secret! Sour Cream's pleasantly tangy taste gives both garden vegetable and fruit salads a sparkling new flavor. Spoon it on right from the carton, or, for variety, try it with lemon juice added. How about one of these delicious "Summer Supper" salads tonight?

Refreshing "Rainbow" Fruit Salad. Line a bowl with lettuce, add colorful watermelon and cantaloupe balls, sweet dark cherries. Top with chilled Sour Cream.

Hearty "Main Dish" Salad. In a bowl lined with crisp lettuce, mix sliced cheese, cold meats and hard-cooked eggs, tomato wedges, chopped onion or chives. Toss well. Top with chilled Sour Cream.



FREE RECIPE BOOK

50 Sour Cream Recipe Ideas—for one carton top from any brand Sour Cream.

SEND FOR YOURS RIGHT AWAY!

American Dairy Association

Dept. A, Box 1266

Minneapolis, Wisconsin

Enclosed is top from a carton of Sour Cream. Please send me Free Booklet: "50 Wonderful Ways to Use Sour Cream."

Name: _____

Street: _____

City: _____ State: _____

AMERICAN DAIRY ASSOCIATION • Chicago

Figure 3

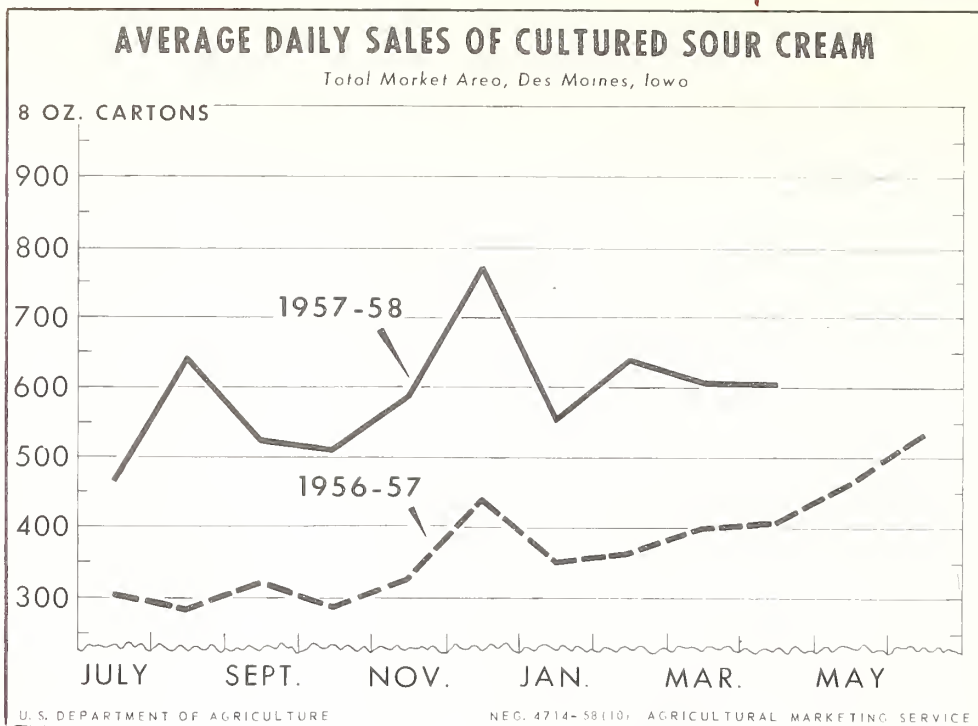


Figure 4

December is the traditional seasonal high month for sales of sour cream and whipping cream in this area. The strong peak in December 1958, is believed to be due not only to this seasonal influence coupled with the usual amount of advertising of the product, but also to the increased interest and usage pattern induced by the earlier promotional activities of the market test.

As mentioned earlier, the scarcity of information on the production and distribution of the product on a national basis makes it difficult to find figures with which to compare the Des Moines data. For this reason, California, one of the few States where data on sour cream are available, was selected for comparison purposes. Sales of sour cream in California, a relatively high consumption area where sour cream is regularly promoted, are available through the Dairy Information Bulletin, California Crop and Livestock Reporting Service. Data from this source also indicate a steady growth in sales of sour cream, although not so pronounced as found in the test area. For example, sales in April 1958 were about 10 percent greater than in April 1957. In fact, in no month in the 4-year period was the gain in sales over a year earlier as great as that found for the Des Moines area, though this may be the result of a higher degree of market saturation in California.

Table 1.--Sales of sour cream in California, January 1955 through October 1958

Month	1955		1956		1957		1958	
	Sales	:Change 1/	Sales	:Change 1/	Sales	:Change 1/	Sales	:Change 1/
	1,000 Gallons	Percent	1,000 Gallons	Percent	1,000 Gallons	Percent	1,000 Gallons	Percent
January.....	61	13.0	76	24.6	88	15.8	116	31.8
February.....	67	19.6	77	14.9	91	18.2	108	18.7
March.....	66	11.9	84	27.3	106	26.2	124	17.0
April.....	68	17.2	80	17.6	107	33.8	118	10.3
May.....	70	7.7	88	25.7	115	30.7	135	17.4
June.....	72	10.8	97	34.7	117	20.6	123	5.1
July.....	78	8.3	91	16.7	120	31.9	127	5.8
August.....	79	25.4	95	20.3	122	28.4	131	7.4
September.....	75	23.0	85	13.3	107	25.9	128	19.6
October.....	70	16.7	83	18.6	108	30.1	128	18.5
November.....	68	17.2	86	26.5	120	39.5		
December.....	85	39.3	108	27.1	143	32.4		
Jan.-Dec.....	859	2/N.A.	1,050	22.2	1,343	27.9	----	----

1/ Percent change from same month in previous year. All percentages are "plus".

2/ N.A. Not available.

Consumption Per Person

For May 1957 through April 1958, sour cream sales in Des Moines (Polk County) totaled 75,391 pounds, after adjustment to exclude country routes. This represents a per person consumption of 4.5 ounces for the year. In California, for the same period, 11,336,000 pounds (multiplying gallons by 8) were sold for a per person consumption of 13 ounces 4/--almost three times the Des Moines figure.

Weekly Sales of Sour Cream During the Market Test

The week prior to the promotional period (the week ending July 27, 1957) is used as the base week throughout this report.

Total sales of sour cream for this period were 3,063 8-ounce units 5/; 2,244 of these were sold in Polk County and 819 in the market area outside

4/ Population of California estimated at 14,025,000 (civilian). Bureau of the Census, July 1958.

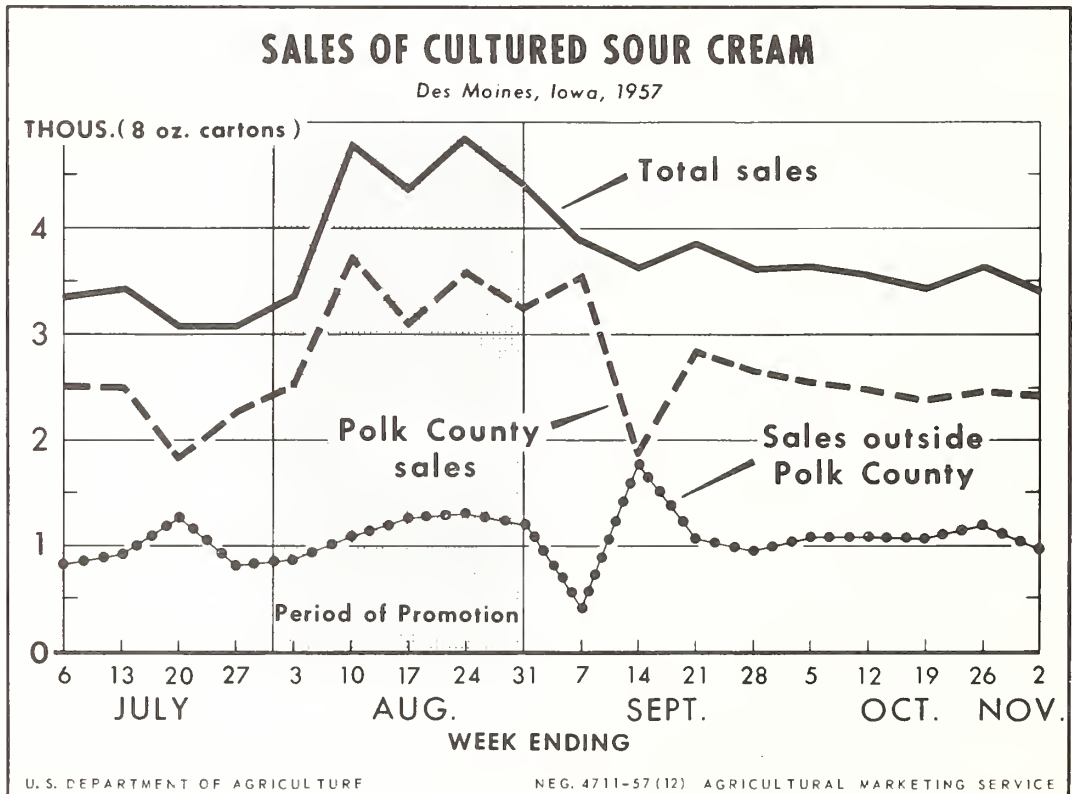
5/ Because the 8-ounce carton is almost standard in this area, the totals have been converted to 8-ounce units, even though some sour cream was sold in a 32-ounce container for institutional use.

Polk County. For the market as a whole, sales in the base week were 5 percent below the weekly average sales for July. However, one firm had promoted sour cream during late June and early July, and the average sales for July are believed to reflect that promotion (fig. 5).

The sharp drops occurring in the Polk County area during the week ending September 14, and in the area outside Polk County during the week ending September 7, are believed to have been caused by a change in sales efforts in connection with the Labor Day weekend. It is assumed that the number of routes outside the county were reduced during the short Labor Day week, and sales activity was concentrated in the metropolitan area of Polk County. Then, during the week ending September 14, sales efforts were increased in the outlying areas, while city outlets depleted the rather heavy inventories of the previous week.

A similar situation existed during the week ending July 20. Nevertheless, these fluctuations offset each other and the total sales remained well above the base period.

During the promotion period (August), the three marketing areas attained substantial peak increases over the base period. Polk County sales rose to a maximum of 3,702 8-ounce units, or an increase of 65 percent over the base week. For the 9-week period after promotion, or at the end of the market test, sales of cultured sour cream averaged 14 percent above the base period.



In the area outside Polk County, during the market test, sales of cultured sour cream reached a peak of 1,755 8-ounce units, an increase of 114 percent over the base week. Average sales in this area for the 9-week period after the promotion were 29 percent above the base period.

The combined areas attained a high point of 4,856 8-ounce units over the 3,063 of the base week. This represents an increase of 59 percent (fig. 6).

For the subsequent 9-week period, an average gain of 19 percent over the base week was maintained, even though the seasonal appeal of the summer salad campaign no longer applied and the normal holiday upturn was not yet in effect.

Comparison Between Sour Cream and Related Products

Data were collected in the market area to provide comparisons between sour cream and related products of a relatively high milkfat content. The related products considered to be somewhat closely associated on a milkfat basis and for household uses are whipping cream (about 36 percent milkfat) and coffee cream (16 to 25 percent). Analysis indicated that the heavy increases in sales of sour cream during the promotional program had no adverse effect on either of the related products (fig. 7).

Although there appears to have been an inverse relationship between sales of sour cream and whipping cream during the first 3 weeks of promotion, the

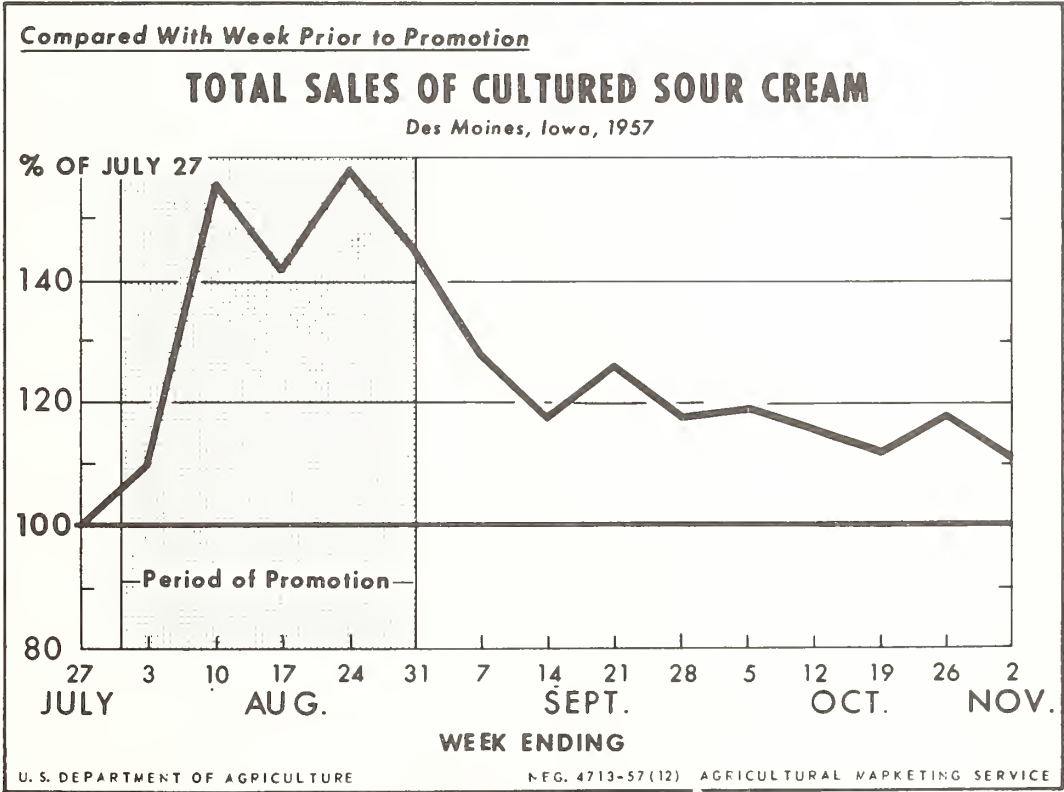


Figure 6

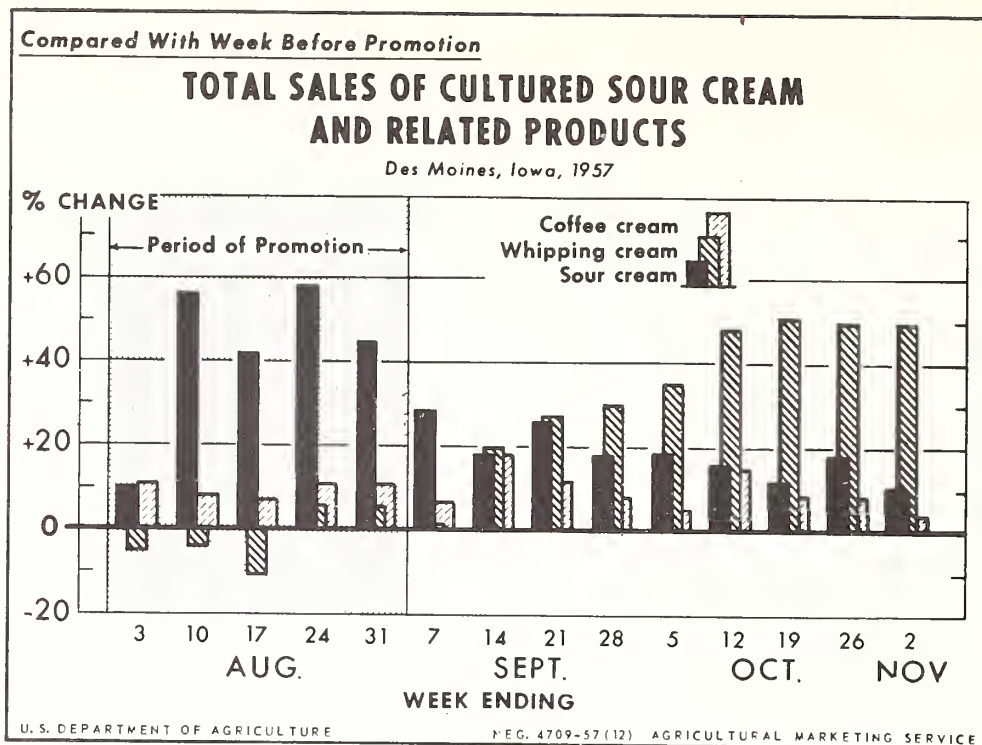


Figure 7

data for the previous year show that whipping cream sales were following a seasonal pattern. The volume of sales of whipping cream is normally lower in the summer months, increasing as the weather grows cooler, and reaching a peak in December.

Half-and-half was not considered to be a closely associated product because of its lower milkfat content (about 11 percent). However, the data showed that the sales of sour cream apparently had no appreciable effect on the sales of half-and-half during the market test.

Contribution to the Movement of Milkfat by Sour Cream and Related Products

During the market test (weeks ending July 6 through November 2), approximately 11,000 pounds of milkfat per week reached consumers in the total market area through sales of cultured sour cream, whipping cream, coffee cream, and half-and-half. Half-and-half provided an outlet for about two-thirds of this volume, followed by whipping cream and coffee cream with about 15 percent each. Sour cream accounted for about 3 percent of the total (fig. 8).

During the base period (July), the total market area absorbed 299 pounds of milkfat through sales of sour cream. Of this, Polk County received 217 pounds, and 82 pounds went to the market area outside the county. During the period of promotion, sales in the total market area reached 474 pounds, or an

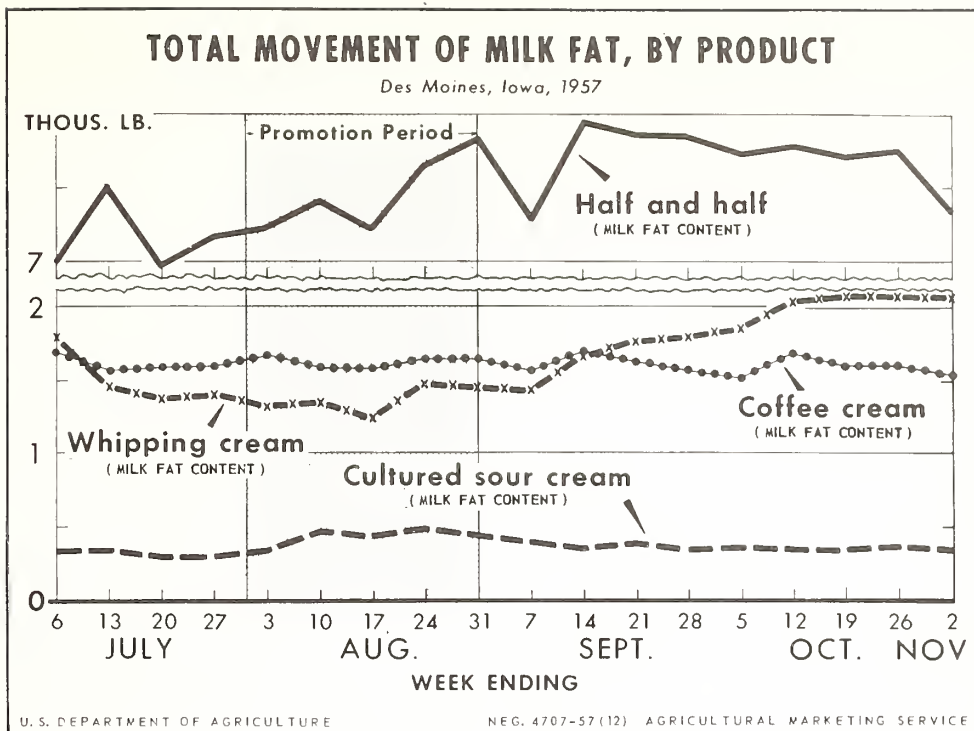


Figure 8

increase of 58 percent over the base period. Polk County sales totaled 357 pounds, or a 64-percent increase; and the area outside Polk County rose to 128 pounds, or a 56-percent increase over July.

During the promotional period, the amount of milkfat entering the total market area in sour cream (as a percentage of the total milkfat for the 4 products) rose from 3 percent during the base week to 4 percent.

Polk County Sales of Sour Cream by Type of Outlet

The data furnished by the cooperating dairies provided a breakdown of sales in Polk County by type of outlet. There were no dairy-owned stores, and all retail sales were made through home delivery routes. The wholesale outlets consisted of two major groups, groceries and delicatessens, and restaurants and hotels, with a negligible amount going to hospitals (fig. 9).

Groceries and delicatessens provide the largest volume outlet for sour cream in the Des Moines area. The curve for this channel follows proportionately the curve for sour cream sales in Polk County (fig. 5), except for the week ending August 10, when home delivery sales reached a peak. The peak for home delivery sales during the week ending August 10 is due primarily to a concentrated promotional effort by one dairy, resulting in an increase of more than 1,000 percent in this outlet over the base period.

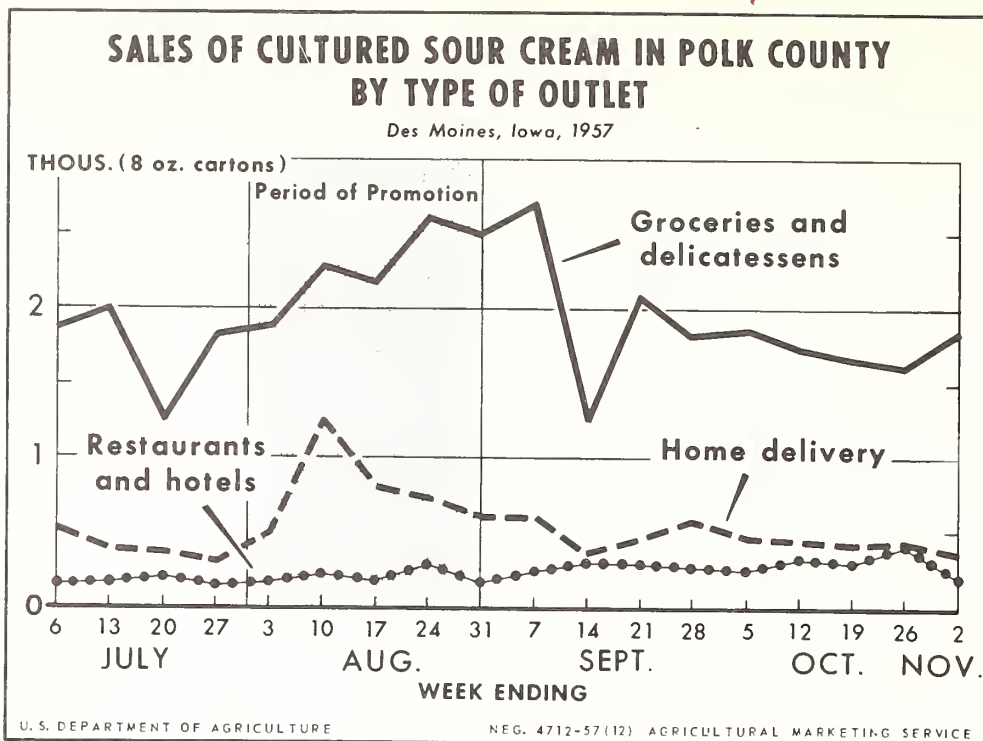


Figure 9

Although promotional efforts were directed to the consumer and stressed "supper salads," the volume of sales of sour cream to restaurants and hotels increased steadily during the 18-week test period to a point where it equaled home deliveries. While this rise was not spectacular, it exhibited a great deal more stability than the home delivery outlet.

Store Information

A total of 28 retail supermarkets, randomly selected, comprised the sample representing at least 80 percent of the retail food trade in the Des Moines area. These supermarkets were contacted once before the promotion period, once during this period, and a third time after the promotion, at which times a schedule of store information on sour cream and related dairy products was completed.

Number of Facings

The number of facings ^{6/} of sour cream in each display was closely accounted for on the schedules. All facings were 8-ounce cartons with an estimated width of 4 inches. For the period before promotion, information

^{6/} A facing represents the front of 1 carton. A display 2 cartons wide and 2 cartons high would be 4 facings, regardless of the number of cartons behind the facings.

revealed an average of 4.5 facings per store for a total of 24 stores. The remaining 4 stores contained either 1 or 2 loose cartons of sour cream, which is not considered to be a facing, or there was no sour cream in the display case at the time of the observation.

During the promotion period, a noticeable increase in the number of facings of sour cream took place. An average of 5.7 facings per store, representing an increase of 1.2 facings over the base, was observed. Relevant to this increase was an increase in the number of stores displaying facings of sour cream. Twenty-seven of the 28 stores displayed from 1 to 18 facings of sour cream, the range being the same for the before- and during-promotion periods. After the promotion period, the average number of facings remained almost the same as the 5.7 average of the promotional period.

Width of Display

The average width of display for 24 stores before the period of promotion was 10.5 inches, with a range of 4 to 36 inches. During and after promotion, there was little change in dimension. An increase of 0.1 inch made the average width for the stores 10 6 inches, with a range from 4 to 28 inches. The width of display did not change correspondingly with the number of facings per store, primarily because an increase in number of facings was effected by increasing height rather than width of display.

Type of Cooler

All displays of sour cream were located within a refrigerated milk box. Seventy-five percent of the 28 total displays were located in open top compartments, while the remaining 25 percent were contained in a vertical glass door cooler.

The displays of sour cream within the vertical glass door compartments were located at a height of approximately 5-1/2 feet, thus being slightly above eye level with the potential consumer and with the face of each carton plainly visible. Contrasted to the vertical glass door coolers are the more numerous displays in open-top coolers where the lid of the sour cream carton is most prominent in attracting attention. This emphasizes the importance of an attractive cover, easily identified as sour cream, since the customer often sees only the top of the carton.

RESULTS OF THE HOUSEHOLD CONSUMER SURVEY 7

Background

Between October 2 and November 9, 1957, shortly after the various special promotional activities for sour cream had been completed, a probability sample of homemakers in Des Moines and its major suburbs (Fort Des Moines, Urbandale,

7 Margaret Weidenhamer was responsible for this phase of the study.

and West Des Moines) was interviewed. The region sampled does not coincide exactly with the areas for which sales data were collected, but it does give a good representation of homemakers in the more urbanized sections of Polk County.

The sample was divided into two parts, one labeled "basic" and the other "supplementary." In the basic part everybody was interviewed whether a purchaser of sour cream or not; in the supplementary part interviews were completed only with those homemakers who indicated they had bought sour cream within the preceding 12 months. The supplementary sample was taken to provide a large enough number of sour-cream users to permit detailed separate analysis.

Eighty-three percent of the eligible homemakers were interviewed. Of the 697 interviews reported, 319 were with users and 378 were with non-users of sour cream. These two groups were given proportionate weights in calculations based on the total group.

Since at the time this survey was conducted there was no general information on consumer's thinking about sour cream, the questionnaire for this study was designed to provide data on housewives' use of and opinions about sour cream, as well as on their awareness of the promotion campaign.

In interpreting these results, allowance must be made for error that might result from interviewing a sample and not the whole population. Figures based on all the homemakers interviewed may be assumed to be within from 1 to 4 percentage points, plus or minus, of the figures that would have been obtained from a survey of all homemakers in Des Moines. For smaller groups, such as users or non-users, or respondents in various income categories, the sampling error is somewhat higher.

NOTE: The terms "homemakers," "respondents," "housewives," and "women" have been used interchangeably in this report to describe the person in each household from whom data were obtained. The term "use" also appears interchangeably with "purchase" or "buy" throughout the report. However, the introduction to the questionnaire explained that the study was about sour cream that was purchased from a store or dairy (commercial sour cream), not home-soured cream, and interviewers were instructed to remind respondents during the interview, if necessary, that this study was concerned only with the commercial product. See appendix for the detailed tables referred to in the text.

Information About the Respondents

A little more than half of the women interviewed had families of 1 to 3 persons, including themselves, and the remaining 45 percent were in families with 4 or more members. About one-fourth of the families had yearly incomes, before taxes, under \$3,500; one-fourth had incomes between \$3,500 and \$4,999; another fourth reported incomes between \$5,000 and \$6,999; 1 homemaker in 6 said her family's yearly income was over \$7,000; and 7 percent of the respondents did not give information on family income.

A majority of the respondents (60 percent) had attended high school; another 24 percent had attended college; and only 15 percent reported that their formal education was limited to grammar school. Forty was the median age.

Although only 6 percent of the women reported that commercial sour cream had been used in their parents' home, about two-thirds reported that their parents had used home-soured cream (table 2).

Who Used Sour Cream

A substantial number of Des Moines homemakers were users of sour cream. Almost one-third had purchased some within the preceding 12 months.

As can be seen in figure 10, family size and homemaker's age did not appear to influence whether or not housewives purchased sour cream. A factor which did seem to be related, although not strongly, was the background of family eating patterns. Homemakers whose parents had used sour cream (home-soured cream in most cases) were a little more likely to have purchased commercial cultured sour cream in the past year than those whose parents had not used it, but the differences were not large.

The most striking differences in use occur with respect to family income and homemaker's education. Upper income and better educated homemakers were much more likely to have purchased sour cream during the preceding year than were lower income, less well-educated respondents. (These same data are presented in another way in table 2 which shows characteristics of users as compared with non-users.)

Frequency of Use

Many of the users of sour cream did not purchase it often; almost two-thirds estimated they had bought it less than once a month during the preceding year, and 4 out of 5 had none in their homes at the time of the interview. Homemakers were classified as frequent, moderate, or infrequent users on the following basis:

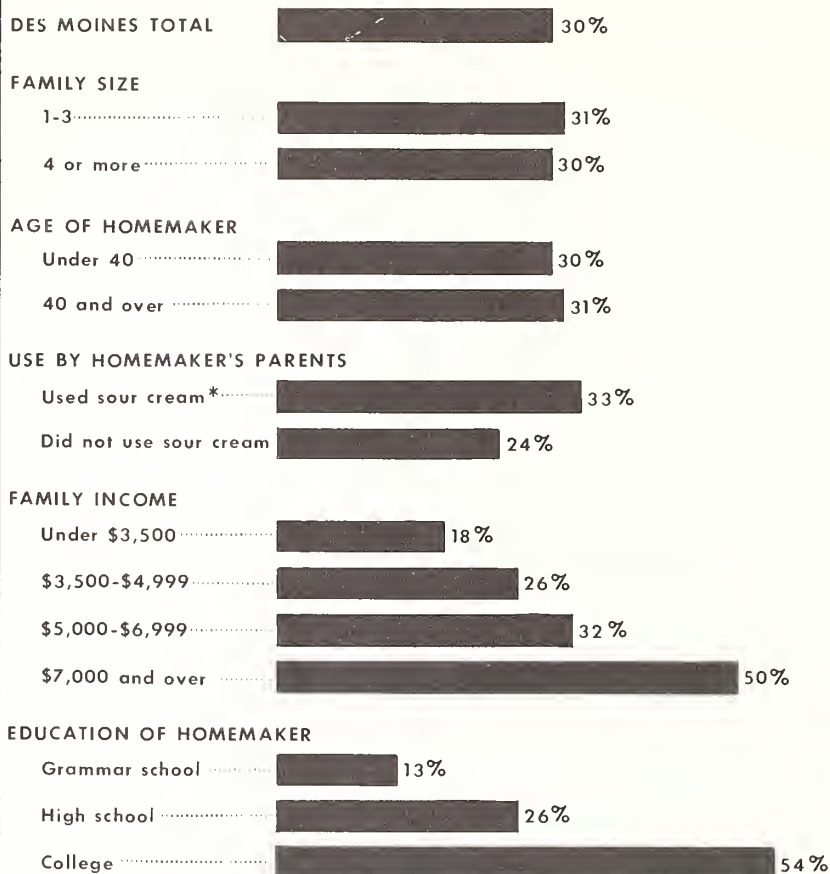
Infrequent users - 1 to 3 purchases in last year (30 percent of users)
Moderate users - 4 to 11 purchases in year (32 percent)
Frequent users - 12 or more purchases in year (37 percent)
(frequency of use not ascertained for 1 percent)

Older, less well-educated homemakers with smaller families were somewhat more likely to be infrequent users. Again, the strongest relationship was with income. Families earning less than \$5,000 were much more likely to be infrequent users than families with higher incomes (figure 11 and table 4).

When the infrequent and moderate users were questioned as to why they did not use sour cream more often, the responses were much the same as those of the non-users to a similar question discussed above. All told, almost half

HOMEMAKERS WHO HAD USED CULTURED SOUR CREAM IN PRECEDING YEAR

Des Moines, Iowa, 1957



* HOME-SOURCED OR COMMERCIAL

U. S. DEPARTMENT OF AGRICULTURE

NEG. 7377-59(6) AGRICULTURAL MARKETING SERVICE

Figure 10

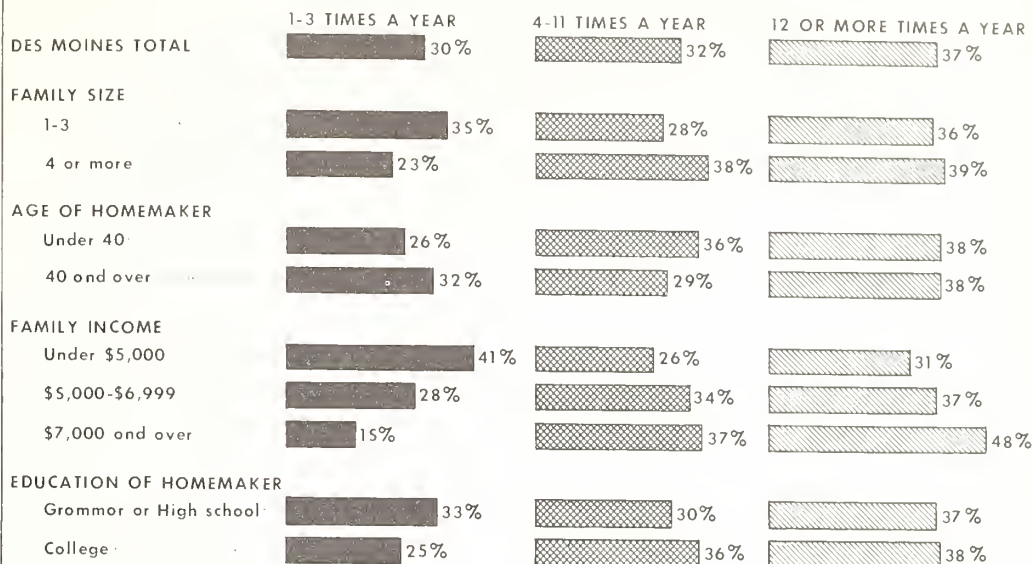
of those respondents who had purchased sour cream less than 12 times in the past year indicated a low level of familiarity with the product. Other reasons for not buying sour cream more often, each accounting for 10 to 14 per cent of the responses, included comments about health or weight, the fact that some members of the family disliked sour cream, and the feeling that it was too expensive to use more often (table not shown).

First Purchase of Sour Cream

A substantial proportion of sour-cream users had started purchasing it within the preceding year: One in 7 had been buying it for 1 to 3 months, and 2 in 7 had been buying it 4 months to a year. The remaining 4 in 7 were almost equally divided between those who had been using it for 1 to 4 years, and those who had started using it over 4 years ago.

FREQUENCY OF USE OF SOUR CREAM AMONG PURCHASING HOMEMAKERS

Des Moines, Iowa 1957



U. S. DEPARTMENT OF AGRICULTURE

NEC. 7378-59(1) AGRICULTURAL MARKETING SERVICE

Figure 11

In general, the more frequently a homemaker purchased sour cream, the longer she had been using it. Although this relationship might be a reflection of other factors, when it is considered in conjunction with findings discussed above, it suggests the possibility that knowledge of the product's versatility or an increased confidence in ability to prepare foods with it, both of which come with experience, may lead to increased consumption by many homemakers (table 5).

When homemakers were asked "How did you happen to start using sour cream in your home?", the most frequent responses, each mentioned by about 1 in 4, were reasons related to recipes which called for sour cream, the fact that sour cream was part of the family eating pattern, and someone having told the respondent about sour cream or ways in which it could be served. One homemaker in 6 had started using sour cream after she tasted it or something made with it in a restaurant or in someone else's home, and 1 in 10 said that advertising had influenced her to start buying the product.

Although no one reason predominates in the explanations given by all the purchasers of how they happened to start using sour cream, there are striking differences depending on how long they had been purchasing it. The majority of housewives who had been buying the product longest explained that using sour cream was a family eating habit; many in this group also mentioned recipes which called for sour cream. Among women who had been buying sour cream less than 4 years, family eating habits are much less likely to be mentioned, and the influences of hearing about sour cream from friends, of tasting something made with it, and of advertising, assume increasing importance (table 6).

Reasons for Using it Now

When "old" users (those using sour cream for over three months) were asked why they used sour cream, the most frequent explanation, voiced by 2 in 5, was flavor: They and their families liked the way it tastes. The next most important group of responses, mentioned by 1 in 3, was versatility: Respondents referred to specific uses to which sour cream could be put such as in baking, in salads, or in dips. About 20 percent of the respondents mentioned convenience: They used sour cream because it is easy to use or is less trouble than home-soured cream.

Almost 7 in 10 old users stated, in response to a specific question, that there was nothing they disliked about using sour cream. The most frequent unfavorable comment, mentioned by about 1 in 10, was that sour cream was too expensive (table 7).

The New Users

The 13 percent of users who had made their first purchase of sour cream from 1 to 3 months prior to interviewing (after the initiation of the special promotion campaign) were asked a few additional questions.

Nearly all of these "new" users made favorable comments in response to a query on what they thought of sour cream or things made with it. The most frequent comments had to do with the quality or characteristics of commercial sour cream, such as "has a good texture," "it's creamy," "it mixes well," and remarks about its good taste or appealing flavor.

Almost three-fourths of the new users indicated that there was nothing they disliked about sour cream. The only fairly frequent (17 percent) adverse comment about commercial sour cream was that it was too expensive (tables not shown).

Ways in Which Sour Cream is Used

The most frequently mentioned way of serving sour cream, when all the ways homemakers had used the product were considered, was in baked goods, followed closely by use in salads or in salad dressings. Sauces or toppings and dips were also mentioned by a sizable proportion of purchasers. The rank order of responses to another question about the ways sour cream was most often used was about the same: Baked goods and salads again headed the list (table 8).

What it Substitutes For

A listing of what sour cream replaces in recipes does not show whether there is a net gain or loss in butterfat sold, since the frequencies and amounts involved are not indicated, but it does give some idea of what sour cream substitutes for in the opinion of homemakers. For almost 40 percent of the uses mentioned, housewives say sour cream replaces non-dairy products such

as shortening, mayonnaise, and salad dressings. In about 30 percent of the recipes, sour cream is included instead of dairy products like butter, cream, cream cheese, and milk. For almost as many recipes, homemakers state that sour cream is not a substitute; they are putting it in something which they would otherwise not make, or are using it in addition to the ingredients they had used previously for that purpose. Thus, two-thirds or more of the time sour cream apparently does not substitute for other dairy products (table 9).

Use for Guests

The majority (8 in 10) of homemakers who were sour-cream users had served it to guests. Those who had not indicated that, for the most part, it was not because of any shortcoming of the product. Many respondents had not had the opportunity to serve it to guests. Only about one-sixth of the respondents who had not served sour cream to guests felt that it wasn't special enough to serve to company or felt their guests would not care for it (tables not shown).

Seasonal Use

About one-third of the women said they did not buy more sour cream at one season than another. Another 1 in 4 hadn't been using it long enough to express an opinion on seasonal use. Among the remainder, seasonal use of sour cream was highest in winter, when 1 in 4 used it more often than in any other season. The usual explanation for increased use in winter was that more baking was done then. Some of these who used more sour cream during the winter said additional entertaining at that time accounted for the increased use. Sour cream was used next most often during the summer months, chiefly because salads are popular at that time of year (tables not shown).

Reasons for Non-Use

About half the Des Moines women who had not used sour cream gave a reason indicating they had the impression that it is useful only as an ingredient in recipes which specifically call for it, or that they did not know enough about making things with sour cream to add it to their menus. About 1 non-user in 5 didn't like it or thought she wouldn't like it, 1 in 6 felt it was too expensive, and almost as many avoided serving sour cream because they were on diets, or believed sour cream to be too fattening (table 10).

Although 9 in 10 non-users had never used sour cream in their own homes (table not shown), only one-fourth of this group said that they had never tasted sour cream or things made with it. Most of those who had tasted sour cream had eaten baked goods such as cakes, cookies, and breads which had been made with it. One in 4 had tasted sour cream as a salad dressing or in salads, 1 in 5 had eaten it in sauces or toppings, and 1 in 10 mentioned pancakes or waffles and dips.

Non-users replied in much the same way to a question about the kinds of things they thought sour cream would be good for. The majority of responses favored baked goods, followed by salads, and then sauces or toppings (table 11).

How Fattening Is Sour Cream?

All Des Moines homemakers, both users and non-users, were asked how fattening they thought sour cream was in comparison with a list of other products. Sour cream has a higher caloric content than all the other dairy products included except whipping cream; but it has a lower calorie count than salad dressings or mayonnaise.

	<u>Approximate number of calories per tablespoon</u>
Cottage cheese.....	15
Half-and-half.....	25
Coffee cream.....	30
 Sour cream.....	 45
 Whipping cream.....	 50
Salad dressing.....	60
Mayonnaise.....	90

Many homemakers appeared to underestimate the caloric content of sour cream compared with other dairy products, but to overestimate its calorie count in relation to salad dressing or mayonnaise. Figure 12 shows that the majority felt that sour cream is more fattening than half-and-half or cottage cheese, but that it is somewhat less fattening than whipping cream, and about half believed it to be less fattening than salad dressings or mayonnaise. Opinion on sour cream compared with table or coffee cream was divided: About one-third thought sour cream more fattening than table cream, one-third thought it less fattening, and almost one-third thought they were about the same. Differences of opinion between users and non-users were minor (table 12).

How Homemakers Thought Sour Cream Was Made

All the Des Moines homemakers were also asked how they thought sour cream was made. Almost half of the women thought it was the result of adding a souring agent to sweet cream as a "starter," and another 1 in 4 thought it was processed in some way, but were unable to specify the method. Eighteen percent had the impression that the cream was allowed to sour by itself, 13 percent thought that a temperature change was necessary for its production, and 21 percent didn't have any ideas about the method used.

Non-users had about the same ideas on how sour cream was manufactured as users, the major exception being that 21 percent of non-users, compared with 8 percent of users, believed that natural fermentation was the process involved (table 13).

HOMEMAKERS' OPINIONS ABOUT HOW FATTENING SOUR CREAM IS COMPARED WITH OTHER PRODUCTS

Des Moines, Iowa, 1957

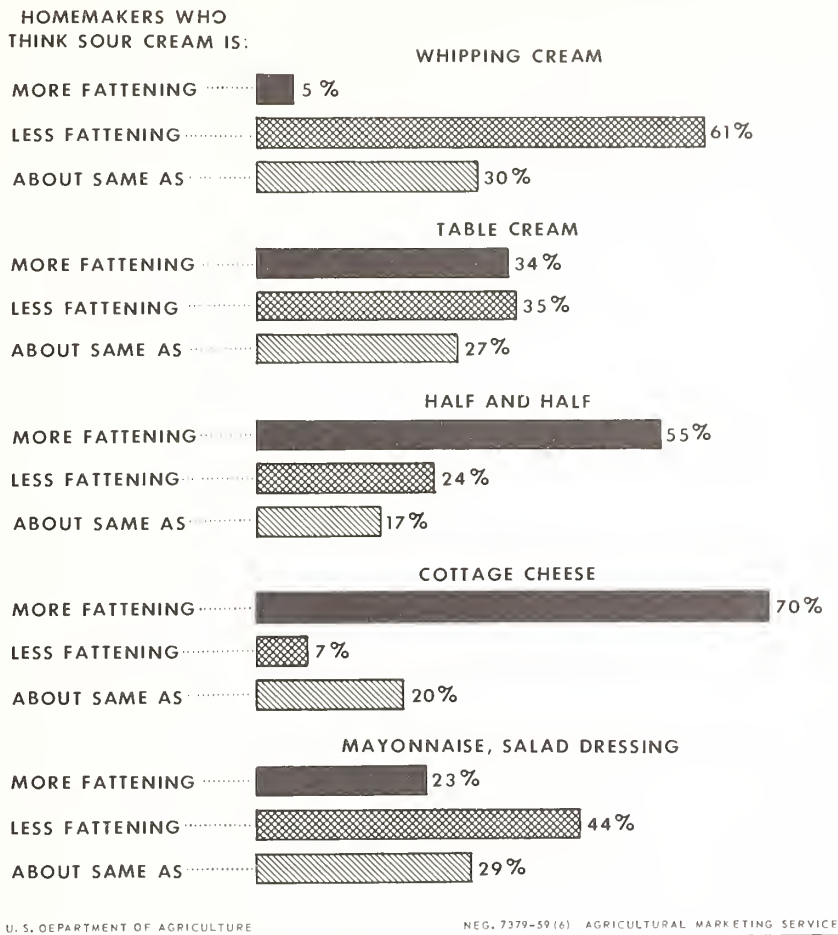


Figure 12

Evaluation of the Promotion Campaign

An attempt to measure the penetration of a specific promotional campaign, particularly one for a product which had been on the market previously, by asking homemakers whether or not they had noticed any aspects of the campaign is fraught with many dangers. For example, respondents may over-report "awareness" because they recall advertising which was not connected with this particular promotion, or they may under-report "awareness" because they have since forgotten about an advertisement which they did notice at the time they were exposed to it. It was also thought possible that some respondents' answers might be influenced by a desire to please the interviewer, or an unwillingness to admit they had not noticed some "special" advertising. Since no feasible alternative was available, a variant of the method which depends on respondents' recall was employed for this study. It cannot be said that

all the potential biasing errors which could have occurred in the gathering and analyzing of these data have been prevented or eliminated, but the following precautions were taken in an effort to avoid known pitfalls.

The last section of the questionnaire was devoted to queries about the special promotion. Each homemaker interviewed was first asked, "Have you noticed any special advertising or promotion for sour cream recently--that is, since the beginning of August?" Those who answered in the affirmative were asked to describe in as much detail as possible what kinds of things they had noticed. The interviewer then said (to all homemakers regardless of their answer to the preceding question), "Now I want to ask you about some specific types of advertising, just to be sure that we've covered everything you may have noticed recently. Have you heard any commercials about sour cream on the radio, or not? Have you seen any commercials about sour cream on television, or not? (etc.)" In each case those who answered "Yes" were asked to tell the interviewer as much as they could remember about these ads.

Testing of the questionnaire was carried on simultaneously in Des Moines, and in Chicago, where no special promotion of this type had taken place. The homemakers interviewed during the pretest in Chicago were almost unanimous in answering "No" to each of the series of questions about the promotion campaign, which led to the conclusion that homemakers did not feel impelled by wording of the questions to answer in the affirmative.

About half-way through the series a control was included; homemakers were asked if they had seen any billboards along the roads advertising sour cream. No special billboard advertising featuring sour cream had taken place within the specified time period. Ninety-seven percent of the sample interviewed during the actual field work gave negative answers to this question, which provides further evidence the act of questioning did not bias the answers.

Among the few respondents who did answer positively, many explained they had seen "institutional" ads which mentioned many dairy products, including sour cream, and some mentioned ads they had noticed in other cities while traveling. Comments such as these, for this and other questions in the series, enabled the coding staff to edit the questionnaires, placing respondents in the "not aware" category when responses clearly indicated they were not referring to the special campaign.

Homemakers' Awareness of the Promotion Campaign

Awareness of one or more aspects of the promotional campaign was widespread among both users and non-users of sour cream. Nearly 60 percent of all the homemakers were aware of some aspect of the promotion. This number was made up of almost three-fourths of the sour-cream users and about half of the non-users. Better educated, upper income homemakers were more likely to remember having seen or heard something about the promotion, as were purchasers of sour cream. (Since better educated, upper income homemakers are also the most likely to be users of sour cream, these findings are probably closely related.) The fact that purchasers were more likely than non-purchasers to

have been aware of the campaign may be due, at least in part, to the normal tendency of an individual to be conscious of what is of interest to him (fig. 13 and table 14).

About 30 percent of the Des Moines housewives had heard about the recipe booklet which was made available during August and September, and about one-fourth of this 30 percent had actually received a copy. Sour cream users were more likely to have both heard about and received it. Although the majority of these homemakers had not used any of the recipes at the time they were interviewed, almost all of them had looked through the booklet and had reacted favorably to it.

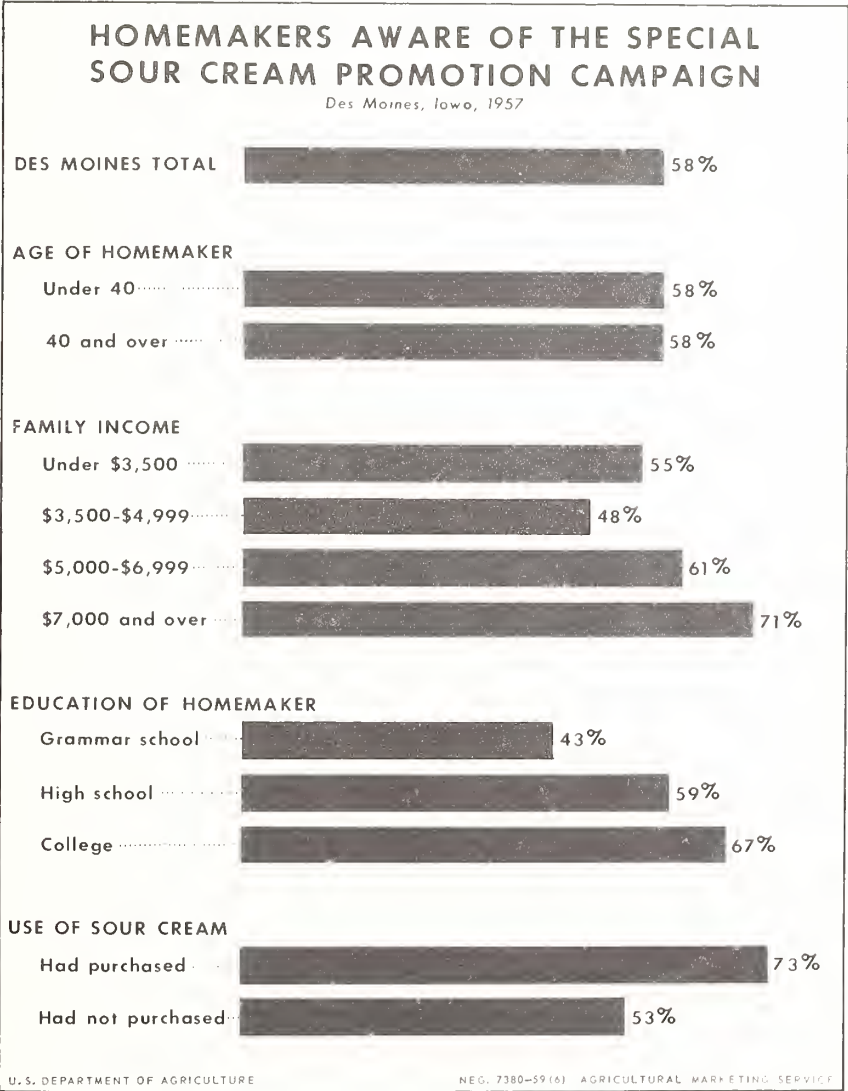


Figure 13

Roughly one-tenth of all the homemakers had noticed in-store advertisements of sour cream or differences in displays in the retail food stores they patronized, and about the same proportion reported having received leaflets or a "sales talk" on sour cream from their milkmen (table 15). (Fifty-eight percent of Des Moines' homemakers had milk delivered to their homes.)

Possible Influence on Non-Users

Since summer salads played a major role in the promotion campaign, homemakers who had not mentioned this particular use were asked whether or not they thought sour cream would be good as a salad dressing. The answers to these 2 questions indicate that two-thirds of the non-users thought sour cream would be good for salad dressings. Only 1 in 5 felt that sour cream would not be good as such a dressing and about 1 in 10 expressed no opinion. Those who were aware of the promotion campaign were more likely to be receptive to the idea of using sour cream as salad dressing than were the unaware non-users.

Replies by non-users to the question: "How about for salads--do you think sour cream would make a good salad dressing or not?"

	<u>Total non-users</u>	<u>Aware of promotion</u>	<u>Not aware</u>
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
Had already mentioned salad dressings.....	33	39	27
Would be good.....	35	37	34
Would not be good.....	20	14	26
Don't know or no answer.....	<u>12</u>	<u>10</u>	<u>13</u>
Number of cases.....	378	199	179

All but 2 percent of the users felt that sour cream would be good this way.

Non-users were also asked what they thought the chances were that they would buy sour cream in the next few months. Although the majority did not expect to, about 2 in 10 thought they might, and a few indicated an intention to purchase some in the near future. About twice as many of those who were aware of the promotional campaign said they might or probably would buy sour cream in the next few months as did unaware homemakers.

Replies to the question: "Now tell me what you think the chances are that you will buy sour cream again in the next few months; would you say that you....."

	<u>Total non-users</u>	<u>Aware of promotion</u>	<u>Not aware</u>
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
Probably won't buy it.....	72	63	82
Might buy it, but are not sure.....	20	25	13
Probably will buy it.....	6	9	3
Not ascertained.....	<u>2</u>	<u>3</u>	<u>2</u>
Number of cases.....	378	199	179

Possible Influence on New Users

The pattern of use of sour cream in Des Moines indicates that a few of the new users would have tried sour cream between August and October even if there had been no special promotion. However, the size of the group, plus the explanations for the initial purchase which these homemakers gave in their own words (table 6) indicate that in many cases the promotion was an important factor in their decision to try sour cream. Almost all of the new users (86 percent) were aware of the campaign.

It appears that, for most of those who had recently become acquainted with cultured sour cream, the first impression was a sufficiently favorable one to warrant continuing purchases. About 4 out of 5 new users said that they would probably buy sour cream again in the next few months; only 5 percent felt fairly sure they would not buy it again. A little over half of the new users had already bought it more than once, and about one-third had bought it four or more times between August and the time of the interview (tables not shown).

Possible Influence on "Old" Users

The majority of those who had been using sour cream a year or more felt they were consuming it at about the same rate as they had previously. Responses to the effect that the homemaker was using more or less than a year ago each accounted for about one-seventh of the answers to this question. Those aware of the promotion were more apt to say they were using increased amounts of sour cream than were those who were unaware of it.

Replies by "old" users to the question: "Is that more, less, or about the same amount of sour cream as you were using about a year ago?"

	<u>Total</u>	<u>Aware of promotion</u>	<u>Not aware</u>
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
More.....	15	18	9
Less.....	14	12	18
About the same.....	51	50	54
Wasn't using it a year ago.....	15	16	11
Don't know or no answer.....	<u>5</u>	<u>4</u>	<u>8</u>
Number of cases.....	277	195	82

The reason given most often for using more sour cream at the time of the interview than a year ago was that the women had learned more about how to use it, or had discovered additional ways to serve it.

The reason given most frequently for using less sour cream was that the homemakers did not often use the recipes that called for it. A number of respondents also said that they were cooking or entertaining less often than a year ago, or that they were now on a diet, and thus had less need for sour cream (table not shown).

Roughly one-fourth of the "old" users mentioned using sour cream in new recipes or in different ways than they had the year before. About half of these homemakers indicated that the new way in which they were using sour cream was as an ingredient in salads. Homemakers who were aware of the promotion were a little more likely to mention new uses, but the difference was small.

Among those homemakers who were using sour cream in new ways, half had seen a sour cream recipe which looked interesting enough to try, and almost one-third of the responses indicated that a friend had told them about a new use for the product. Other reasons for using it in new ways included having tasted something made with it, or having experimented and found a new dish in which sour cream tasted good.

Despite the relatively small proportion of homemakers who had increased the number of ways they were using sour cream, over 8 in 10 are interested in learning to serve it in additional ways (tables not shown).

About one-third of the "old" sour cream users had not purchased any between the beginning of August, when the promotion campaign was initiated, and the time they were interviewed. Most of the remainder had bought sour cream 1 to 4 times during that period. Although there were no significant

differences in rate of use between aware and unaware homemakers before the promotion, those who were aware of the campaign were more likely to have made a purchase of sour cream since the beginning of August than were unaware homemakers.

Replies by "old" users to the question: "How often have you bought sour cream since the beginning of August?"

<u>Number of times</u>	<u>Total "old" users</u>	<u>Aware of promotion</u>	<u>Not aware</u>
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
None.....	34	30	42
1 or 2.....	26	28	23
3 or 4.....	16	19	10
5 or 6.....	11	11	11
7 to 11.....	8	8	6
12 or more.....	5	4	7
Not ascertained.....	<u>*</u>	<u>*</u>	<u>1</u>
Number of cases.....	277	195	82

* Less than 1 percent.

Both the post-promotion sales records in Des Moines and the data gathered in the consumer survey lead to the conclusion that cultured sour cream of good quality and properly promoted has considerable potential as a growth product for the dairy industry.

APPENDIX

Table 2.--Characteristics of Des Moines homemakers taking part in the consumer survey 1/

Personal characteristics	Total		Users		Non-users	
	Number	Percent	Number	Percent	Number	Percent
Des Moines total	543	100	165	100	378	100
Age of homemaker:						
Under 40	267	49	79	48	188	50
40 and over	276	51	86	52	190	50
Education of homemaker:						
Grammar or none	83	15	11	7	72	19
High school	324	60	83	50	241	64
College	132	24	71	43	61	16
Not ascertained	4	1	---	---	4	1
Use in homemaker's parents' home:						
Used commercial	35	6	21	13	14	4
Used home-soured	367	68	113	68	254	67
Used neither	110	20	26	16	84	22
Not ascertained	31	6	5	3	26	7
Family income:						
Under \$1,000 - \$3,499	128	24	23	14	105	28
\$3,500 - \$4,999	133	25	34	20	99	26
\$5,000 - \$6,999	154	28	49	30	105	28
\$7,000 and over	88	16	44	27	44	12
Not ascertained	40	7	15	9	25	6
Family size:						
1 - 3 members	299	55	92	56	207	55
4 or more members	244	45	73	44	171	45

1/ The number of cases in some of the subgroups shown in this table and those following, do not add to the Des Moines total because certain characteristics were not ascertained for some respondents.

The number of users and non-users exceeds the number shown for all homemakers because of the proportionate weighting used in computing the total figures.

Table 3.--Replies to the question: "Have you bought sour cream in the past 12 months?"

Background characteristics	Yes	No	Cases
	Percent	Percent	Number
Des Moines total	30	70	543
Age of homemaker:			
Under 40	30	70	267
40 and over	31	69	276
Education of homemaker:			
Grammar school	13	87	83
High school	26	74	324
College	54	46	132
Use in homemaker's parents' home:			
Used commercial or home-soured cream	33	67	402
Did not use sour cream	24	76	110
Family income:			
Under \$3,500	18	82	128
\$3,500 - \$4,999	26	74	133
\$5,000 - \$6,999	32	68	154
\$7,000 and over	50	50	88
Family size:			
1 - 3 members	31	69	299
4 or more members	30	70	244

Table 4.--Replies to the question: "In the past 12 months, about how often have you bought sour cream--how many times all year?" (Asked of all users)

Background characteristics	1 - 3 times	4 - 11 times	12 or more times	Not ascertained	Cases
	Percent	Percent	Percent	Percent	Number
Des Moines total	30	32	37	1	319
Age of homemaker:					
Under 40	26	36	38	1/ *	138
40 and over	32	29	38	1	174
Education of homemaker:					
Grammar or high school	33	30	37	*	190
College	25	36	38	1	129
Family income:					
Under \$5,000	41	26	31	2	104
\$5,000 - \$6,999	28	34	37	1	99
\$7,000 and over	15	37	48	-	84
Family size:					
1 - 3 members	35	28	36	1	184
4 or more members	23	38	39	-	135
Special promotion:					
Aware	30	29	40	1	231
Not aware	29	39	31	1	88

1/ Less than 1 percent.

Table 5.--Replies to the question: "And how long have you been using it?" (Asked of all users)

Personal characteristics	1-3 months	4 months to 1 year	Over 1 year to 4 years	Over 4 years	Not ascertained	Cases
	Percent	Percent	Percent	Percent	Percent	Number
Des Moines total	13	29	29	27	2	319
Age of homemaker:						
Under 40	10	33	30	26	1	138
40 and over	16	24	29	28	3	174
Education of homemaker:						
Grammar or high school	18	26	28	26	2	190
College	6	33	31	29	1	129
Family income:						
Under \$5,000	17	31	25	25	2	104
\$5,000 - \$6,999	18	27	33	20	2	99
\$7,000 and over	5	26	31	34	4	84
Family size:						
1 - 3 members	16	26	30	26	2	184
4 or more members	10	33	27	28	2	135
Frequency of use in past year:						
1 - 3 times	28	43	17	10	2	68
4 - 11 times	8	25	35	30	2	94
12 or more times	4	20	34	40	2	114

Table 6.--Replies to the question: "How did you happen to start using sour cream in your home?"
(Asked of all users)

Replies	Total users	How long had been using sour cream			
		1 - 3 months	4 months to 1 year	Over 1 year to 4 years	Over 4 years
	Percent 1/	Percent 1/	Percent 1/	Percent 1/	Percent 1/
Recipes called for it	26	19	24	27	30
Family eating habit	23	--	10	15	55
Someone told me about it	22	33	31	25	7
Tasted something made with it	17	24	22	22	4
Advertisements or pro-motion	9	31	11	6	--
Easier to use than home-soured	7	--	2	5	6
Noticed it on the market	5	2	3	11	2
Miscellaneous	3	--	4	5	1
Don't know and no answer	4	--	2	1	6
Number of cases	319	42	91	93	86

1/ Percentages add to more than 100 because some homemakers gave more than one answer.

Table 7.--Replies to the questions: "We are interested in the different reasons people have for using various products. What would you say are the main reasons you use sour cream?" "Is there anything you don't like about using sour cream?" (Asked of "old" users)

Replies	"Old" users
	Percent 1/
Reasons for using sour cream:	
Like the taste, we like it	42
Good for specific uses (baking, salads, dips, etc.)	33
Easy to use, less trouble than home-soured	18
Like the texture	7
Keeps well, moist	5
Use it for a change in menu	5
Nutritious	4
Cheaper than some other dairy products	3
Miscellaneous	7
Not ascertained	2
Things disliked about sour cream:	
Nothing	68
Expensive; costs too much	10
It's fattening	6
Bad taste or odor	4
Doesn't keep well	3
Family doesn't like it (general)	3
Not rich enough	2
Miscellaneous	6
Not ascertained	4
Number of cases	277

1/ Percentages add to more than 100 because some homemakers gave more than one answer.

Table 8.--Summary of replies to questions: "What did you use sour cream for the first time you bought it?" "What other ways have you used sour cream?" "Which of these do you use sour cream for most often?" "What other kinds of things do you think sour cream would be good for?" (Asked of all users)

Replies	Way used	Other	Way used	Other
	first time	ways used	most often	ways would be good
	Percent	Percent ^{1/}	Percent ^{1/}	Percent ^{1/}
In baked goods	39	47	32	61
Cookies	13	12	13	15
Cakes (general)	10	17	8	16
Chocolate or devil's food cake	9	7	8	7
General baking	4	2	1	2
Pies (or piecrusts)	2	5	1	9
Breads, rolls, biscuits	1	3	1	11
Icings	--	1	--	1
In salads	24	53	29	30
Salad (general)	9	18	12	7
Salad dressing	6	16	8	7
Fruit salad	6	5	5	4
Cole slaw	2	8	2	6
Vegetable salad	1	6	2	6
In sauces or toppings for	6	26	10	34
Meats or poultry	3	8	2	12
Sauces (general)	2	3	2	7
Bread	1	3	2	1
Vegetable dishes	^{2/} *	8	2	12
Cottage cheese	*	2	*	2
Other	--	2	2	*
In dips	16	15	17	9
On baked or mashed potatoes	8	15	9	16
For dessert, with fruits	3	4	2	3
In goulash or stroganoff	2	2	*	--
Pancakes	1	3	1	9
Eat it plain	--	2	1	--
Miscellaneous	1	2	2	1
Would not be good other ways	--	--	--	5
Don't know and not ascertained	*	*	4	12
Number of cases	319	319	319	319

^{1/} Percentages add to more than 100 because some homemakers gave more than one answer.

^{2/} Less than 1 percent.

Table 9.--Replies to the question: "When you use sour cream for _____, what are you using it in place of?" (Asked for each use mentioned; percentaged on total mentions)

Replies	Users
	<u>Percent</u>
Used in place of:	
Non-dairy products	38
Shortening	17
Mayonnaise	10
Salad dressing	7
Other	4
Dairy products	31
Butter	12
Cream cheese	5
Sweet cream	5
Milk	4
Home-soured cream	3
Cheese	1
Other	1
Nothing	27
Miscellaneous	3
Not ascertained	1
Number of mentions	844
Number of cases	319

Table 10.--Replies to the question: "We are interested in the different reasons people have for not using various products. What would you say are the main reasons you don't use sour cream (now)?" (Asked of all non-users)

Replies	Non-users
	<u>Percent</u> ^{1/}
Lack of occasion or familiarity	57
Haven't made anything that calls for it	36
Don't know how to use it	13
Don't do much cooking	8
Preference reasons	19
Don't like the taste	7
Don't like things made with it	5
Doesn't sound good	4
Dislike the odor	3
Too expensive	17
Health reasons	14
On a diet	7
It's too fattening	7
Use home-soured cream	7
Miscellaneous reasons	4
Number of cases	378

^{1/} Percentages add to more than 100 because some homemakers gave more than one answer.

Table 11.--Replies to the questions: "What kinds of things have you tasted with sour cream?" "What kinds of things do you think sour cream would be good for?" (Asked of all non-users)

Replies	Non-users	
	Have tasted....	Think would be good for....
	Percent <u>1/</u>	Percent <u>1/</u>
Baked goods	77	85
Cakes (general)	24	27
Chocolate or devil's food cake ...	19	13
Cookies	14	16
Breads, rolls, biscuits	13	18
Pies or piecrusts	5	6
Icings	2	1
Baking (general)	<u>2/</u> *	4
Other	*	*
Salads	26	37
Salad dressing	11	15
Cole slaw	10	11
Vegetable salad	3	3
Fruit salad	1	1
Salad (general)	1	7
Other	*	--
Sauces or toppings	21	22
Vegetable dishes	11	11
Cottage cheese	6	4
Meats or poultry	3	5
Other	1	2
Pancakes and waffles	10	11
Dips	9	8
Other	12	3
Never tasted sour cream	25	--
Number of non-users	378	378

1/ Percentages add to more than 100 because some homemakers gave more than one answer.

2/ Less than 1 percent.

Table 12.--Replies to the questions: "Would you say sour cream is more fattening, less fattening, or about the same as whipping cream?" "How does it compare with table cream?" "How about half-and-half (etc.)?"

Product	All home- makers	Non-users	Users
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
How sour cream compares with--			
Whipping cream:			
More fattening	5	4	5
Less fattening	61	60	64
About the same	30	32	26
Don't know and not ascertained	4	4	5
Table (coffee) cream:			
More fattening	34	31	42
Less fattening	35	37	30
About the same	27	28	24
Don't know and not ascertained	4	4	4
Half-and-half:			
More fattening	55	55	56
Less fattening	24	25	20
About the same	17	16	19
Don't know and not ascertained	4	4	5
Cottage cheese:			
More fattening	70	68	76
Less fattening	7	7	8
About the same	20	21	14
Don't know and not ascertained	3	4	2
Mayonnaise and other salad dressings: <u>1/</u>			
More fattening	23	25	18
Less fattening	44	42	50
About the same	29	28	29
Don't know and not ascertained	4	5	3
Number of cases	543	378	319

1/ Homemakers were asked about "mayonnaise" and "other salad dressings" separately; the answers were combined in this table since no significant differences existed.

Table 13 --Replies to the question: "How do you think sour cream is made?"

Replies	All homemakers		Users		Non-users	
	Percent	1/	Percent	1/	Percent	1/
Something added		44		51		44
A starter, souring agent (general)	24		27		23	
Acid	9		12		9	
Chemical	4		6		4	
Bacteria	2		3		2	
Vinegar	4		2		5	
Miscellaneous	1		1		1	
Temperature change		13		10		15
Heated	11		6		13	
Pasteurized	2		3		2	
Miscellaneous	2/ *		1		*	
Other ways		22		15		24
Natural fermentation	18		8		21	
Beaten	3		5		2	
Homogenized	1		2		1	
Processed - don't know exactly how		26		17		29
Don't know and no answer		21		20		21
Number of cases	543		319		378	

1/ Percentages add to more than 100 because some homemakers gave more than one answer.
 2/ Less than 1 percent.

Table 14.--Summary of all questions on promotion

Background characteristics	All homemakers		
	Aware of promotion	Not aware of promotion	Cases
	Percent	Percent	Number
Des Moines total	58	42	543
Age of homemaker:			
Under 40	58	42	267
40 and over	58	42	276
Education of homemaker:			
Grammar school	43	57	83
High school	59	41	324
College	67	33	132
Family income:			
Under \$3,500	55	45	128
\$3,500 - \$4,999	48	52	133
\$5,000 - \$6,999	61	39	154
\$7,000 and over	71	29	88
Use of cultured sour cream:			
Had purchased sour cream	73	27	165
Had not purchased sour cream	53	47	378

Table 15.--Homemakers' awareness of selected parts of the special sour cream promotion

Aware	All homemakers	Sour-cream users	Non-users
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
ADA booklet:			
Heard of it	29	43	23
Received it	7	21	2
Had used it	2	7	--
(Proportion who had milk delivered) ..	(58)	(63)	(56)
Received leaflets from milkman	8	15	5
Milkman talked about sour cream	4	11	2
Noticed retail store displays or advertisements	9	7	10
Total aware of promotion (includes items above and awareness of TV, radio, and newspaper promotion)	58	73	52
Number of cases	543	319	378

WEEKLY SALES DATA

1. Product lines stocked and unit sizes:

Cultured	Light cream	Quip
Heavy whipping cream	Half-and-half	Reddi-Whip
Whipping cream	Cottage cheese	Other (specify)
Medium cream	Yogurt	

2. Enter in table below product lines stocked and unit sizes for each product line (from previous question), weekly sales figures (returns from customers and allowances to customers for spoilage, etc., will be subtracted from gross sales to arrive at a net sale figure) and their distribution by type of outlet.

STORE INFORMATION

1. Store name.

2. Address.

3. Display of cultured sour cream:

a. Number of facings of cultured sour cream

b. Items immediately next to cultured sour cream (type of product, container, and brand)

4. Location of display (Check one):

a. Refrigerated box with milk, etc., b. With cheese and/or cold cuts, c. Other (specify)

5. Store advertising of cultured sour cream (check all applicable):

a. Point-of-sale advertising

c. Newspaper advertising

b. Other in-store advertising

d. Other (specify)

6. Store advertising of product related to cultured sour cream (check all applicable):

a. Point-of-sale advertising

c. Newspaper advertising

b. Other in-store advertising

d. Other (specify)

7. Product lines stocked:

a. Cultured sour cream

g. Cottage cheese

b. Heavy whipping cream

h. Yogurt

c. Whipping cream

i. Quip

d. Medium cream

j. Reddi-Whip

e. Light cream

k. Other (specify)

f. Half-and-half

SUGGESTED INTRODUCTION - Good morning (afternoon, evening). I'm working on a survey for the United States Department of Agriculture. The Department wants to know how people like yourself use certain farm products. This survey is about sour cream -- the kind that's sold by some stores or dairies.

1. Have you bought sour cream in the past 12 months? (IF YES - GO TO Q. 8)

NONUSERS

- (IF NO) 2a. Have you ever bought sour cream? (IF YES) 2b. About how long has it been since you've used it?
3. We are interested in the different reasons people have for not using various products. What would you say are the main reasons you don't use sour cream (now)?
4. Tell me what you think the chances are that you will buy sour cream in the next few months; would you say that you probably won't buy it, might buy it but are not sure, or probably will buy it?
5. What kinds of things have you tasted with sour cream? 6. What kinds of things do you think sour cream would be good for?
- 7a. (IF HAS NOT MENTIONED SALADS) How about for salads--do you think sour cream would make a good salad dressing or not? (IF WOULD NOT) 7b. Why don't you think it would be good?

***** (NOW GO TO QUESTION 30) *****

ALL USERS

8. How did you happen to start using sour cream in your home? 9. And how long have you been using it? (If since July 31st, GO TO Q. 17a)

"OLD" USERS

10. We are interested in the different reasons people have for using various products. What would you say are the main reasons you use sour cream? 11. Is there anything you don't like about using sour cream?
- 12a. In the past 12 months, about how often have you bought sour cream--how many times all year? (IF LESS THAN 12 TIMES) 12b. How come you don't buy it more often?
13. How often have you bought sour cream since the beginning of August?
- 14a. Is that more, less, or about the same amount of sour cream as you were using about a year ago? (IF MORE OR LESS) 14b. Why are you using (more) (less) sour cream this year?
- 15a. Are there any seasons or times of the year when you use sour cream more often than you do during other seasons? (IF SEASON MENTIONED) 15b. Why do you use sour cream more during _____?
- 16a. Are you now using sour cream in any new recipes or using it in different ways than you did last year? (IF NO, GO TO Q. 21a) - (IF YES) 16b. What new ways are you using sour cream?
- 16c. How did you happen to start using these recipes?

***** (NOW GO TO QUESTION 21a) *****

"NEW" USERS

- 17a. What do you think of sour cream, or things made with sour cream? 17b. Is there anything (else) you don't like about sour cream?
18. How about the rest of your family--what do they think of sour cream, or things made with sour cream?
19. How often have you bought sour cream since the beginning of August?
- 20a. Now tell me what you think the chances are that you will buy sour cream again in the next few months; would you say that you probably won't buy it, might buy it, but are not sure, or probably will buy it? (IF WON'T OR MIGHT BUY) 20b. Why is that?

ALL USERS

- 21a. What did you use sour cream for the first time you bought it? 21b. What other ways have you used sour cream (in the past year or so)?
22. When you use sour cream for (each use mentioned), what are you using it in place of?
- (If has bought sour cream more than once AND used it more than one way)
23. Which of these do you use sour cream for most often?
- 24a. Have you used sour cream in serving guests? (IF NO) 24b. How come you haven't served it to guests?

25. Are you interested in trying sour cream in new recipes or not?
 26. What other kinds of things do you think sour cream would be good for?

(If has not mentioned salads) 27a. How about for salads--do you think sour cream would make a good salad dressing or not?

(IF WOULD NOT) 27b. Why don't you think it would be good?

28a. Where do you usually buy sour cream? (IF BUYS AT RETAIL STORE) 28b. What brand do you usually get?

29. Do you happen to have any sour cream in your home right now?

ALL HOMEMAKERS - BOTH USERS and NONUSERS

30. Now I'd like to know how you think sour cream compares with the products listed on this card, as far as being fattening is concerned. Would you say sour cream is more fattening, less fattening, or about the same as whipping cream? How does it compare with table cream? How about half and half? (etc., if necessary)

Whipping cream (heavy sweet cream)

Cottage cheese

Table or coffee cream (light sweet cream)

Mayonnaise, or mayonnaise-type dressings

Half and Half (half milk and half cream)

Other salad dressings

31. How do you think sour cream is made? 32a. Have you noticed any special advertising or promotions for sour cream recently--that is, since the beginning of August? (IF YES) 32b. What kinds of things have you noticed?

Now I want to ask you about some specific types of advertising, just to be sure that we've covered everything you may have noticed recently.

33a. Have you heard any commercials about sour cream on the radio or not? * (IF YES) 33b. Tell me as much as you can remember about these ads.

34a. Have you seen any commercials about sour cream on television or not? * (IF YES) 34b. Tell me as much as you can remember about these ads.

35a. Have you seen any billboards along the roads advertising sour cream? * (IF YES) 35b. Tell me as much as you can remember about these ads.

36a. Have you seen any sour cream ads in the newspapers?? * (IF YES) 36b. Tell me as much as you can remember about these ads.

37a. Have you seen or heard about a booklet of sour cream recipes? (IF NO, GO TO Q. 38a) (IF YES) 37b. Have you received a copy of this booklet? (IF NO, GO TO Q. 38a) (IF YES) 37c. How did you get your copy? 37d. What do you think of it? 37e. Have you used any of the recipes in it yet?

38a. Have you noticed any differences in the past few months in the way sour cream is displayed or advertised where you usually shop for food? (IF YES) 38b. What differences have you noticed?

39. Incidentally, where do you usually shop for food?

40a. Do you have milk delivered regularly to your home by a dairy? (IF NO, GO TO Q. 41) (IF YES) 40b. Which one?

40c. Within the past few months has your milkman talked to you about buying sour cream?

40d. Has he given you any leaflets or booklets about sour cream?

41. As far as you can recall, was sour cream ever used in your parents' home?

42. How about in your husband's parents' home?

Now we would like to ask just a few questions about you and the other members of your household.

43. What was the last grade you completed in school? 44. And how old are you?

45. How many people are there in your family living at this address?

46. Are there any other people who usually eat most of their meals with you? (IF YES) How many?

47. And what was your family's total income before taxes last year?

(Use Card)

* Media data not available.



